#### **REMARKS**

This amendment is filed in response to the Office Action dated December 13, 2002 (Paper No. 8).

The specification has been amended to correct misspelled words and typographical mistakes.

Independent Claim 1, paragraph (c), has been amended to incorporate the limitations recited in dependent Claims 7 (in part) and 8, which have been canceled. Claim 1, paragraph (e), and Claim 24, paragraph (e), have been amended in the manner suggested by the Examiner in order to resolve the indefiniteness issue.

Thus the pending claims are now Claims 1-6, 9-13, 15-22, and 24-28.

## The Present Invention Possesses a Unique Combination of Properties

As defined in amended Claim 1, the present invention is a water-based paint composition, including: (a) an opacifying agent; (b) a viscosity enhancing agent; (c) an anionic surfactant comprised of a salt derived from morpholine and a long-chain carboxylic acid; (d) a polymeric binding agent; and (e) about 10 to about 50% by weight based on the total weight of the composition is a debonding agent active on metal surfaces wherein the debonding agent comprises a vegetable oil.

An important use of the inventive paint is to make labels (i.e., stencils) on an oriented strandboard unit where the paint is applied through a stencil onto a hydrophobic coating (the edge sealant coating). This use presents a very challenging environment for a paint. On the one hand, a labeling paint must have the ability to form a strong bond with the edge sealant coating. On the other hand, the paint must also possess the ability to form a weak bond with the metal surface of the stencil. In addition to the foregoing requirements, the paint must also have the ability to resist bleeding into the edge sealant, the ability to be sprayable, and the ability to be drip resistant when applied through the stencil. Thus, the present paint possesses this unique combination of seemingly contradictory properties. None of the various paint formulations taught by the prior art of record possess this unusual combination of properties.

# 1. The Rejection for Obviousness-Type Double Patenting

Claims 1-5, 7-13, and 15-22 were provisionally rejected under the judicially-created doctrine of obviousness-type double patenting as being obvious over Claims 2-3, 7-13, and 15-22 of co-pending application No. 09/943,885 in view of Nonweiler et al. (U.S. Patent No. 5,700,522).

It is noted that this rejection is only a provisional rejection. Applicant will either submit a complete substantive response or file a terminal disclaimer, after at least some of the claims in co-pending application No. 09/943,885 have been indicated as being allowable. Until that event occurs, the rejection is considered to be premature.

# 2. The Rejection Under 35 U.S.C. §112, Second Paragraph

Claims 1-13, 15-22, and 24-28 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to distinctly claim the subject matter which applicant regards as the invention. Claim 1, paragraph (e), and Claim 24, paragraph (e), have been amended in the manner suggested by the Examiner in order to resolve the indefiniteness issue. Applicant respectfully requests reconsideration and withdrawal of this rejection.

#### 3. The First Rejection Under 35 U.S.C. § 102(b)

Claims 1-5, 7, 10, 15-19, 21, and 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Krevenas et al. (U.S. Patent No. 4,045,393) taken in view of the evidence given in Rehfuss et al. (U.S. Patent No. 4,521,489). Claim 7 has been canceled. Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

#### The Teachings of Krevenas et al. (U.S. Patent No. 4,045,393)

Krevenas et al. teaches a water base latex paint primer for iron or steel surfaces which will not form rust spots (called "flash rusting") caused by the water content of the paint. The paint contains: (a) a polyacrylic, polystyrene-acrylic or polyvinyl acetate latex emulsion, the polymeric latex emulsion containing from 45 to 60% by wt. solids, the amount of the latex emulsion employed in the paint being from 20 to 30% by wt., (b) 5 to 10% by wt. of a "natural drying oil" selected from the group consisting of tung, linseed, safflower, soya bean, peanut and

tall oil, (c) from 5 to 15% by wt. of a basic zinc phosphite having the formula xZnO·ZnHPO<sub>3</sub> where x is a number from 1/2 to 10; (d) 0.1 to 1.0% by wt. of wetting agents and nonionic emulsifiers; (e) 0.5 to 2.0% by wt. of coalescent agent; (f) 10 to 50% by wt. pigment; (g) a metallic salt drier to adjust viscosity; and (h) water. One type of acrylic emulsion disclosed is Rhoplex MV-9.

Krevenas et al. teaches that only the combination of the basic zinc phosphite and the natural drying oil will produce a paint primer which will prevent flash rusting and that no other latex paint system will prevent flash rusting. (Col. 4, lines 10-16.)

## The Teachings of Rehfuss et al. (U.S. Patent No. 4,521,489)

Rehfuss et al. was cited for its teaching that Rhoplex MV-9 is reported to have a glass transition temperature of 28°C.

## Amended Independent Claim 1 Is Not Anticipated By Krevenas et al.

Krevenas et al. teaches the use of only nonionic emulsifiers (surfactants). Therefore, Krevenas et al. does not anticipate the anionic surfactant now recited in amended paragraph (c) of amended Claim 1. Likewise, dependent Claims 2-5, 10, 15-19, 21, and 22 are not anticipated by Krevenas et al. Accordingly, applicant respectfully requests withdrawal of this § 102(b) rejection based on Krevenas et al.

# 4. The Second Rejection Under 35 U.S.C. § 102(b)

Claims 1-7, 10-13, and 15-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kang et al. (U.S. Patent No. 3,894,976) taken in view of the evidence in Seiner (U.S. Patent No. 3,951,899). Claim 7 has been canceled. Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

#### The Teachings of Kang et al. (U.S. Patent No. 3,894,976)

Kang et al. teaches a dripless, water-base paint containing a latex or rubber-like binder, a pigment, an aqueous vehicle for the pigment and binder, and a small quantity of Heteropolysaccharide-7, a novel heteropolysaccharide in an amount sufficient to give the paint

pseudoplastic properties. The paint may also contain a small quantity of a water-soluble alginate in addition to the novel heteropolysaccharide.

Kang et al. teaches in Example V a paint consisting of: (a) a microbiocide; (b) sodium salt of polymeric carboxylic acid; (c) an anti-foaming agent; (d) propylene glycol; (e) titanium dioxide; (f) 44%-45% by weight aqueous acrylic latex emulsion identified as Rhoplex AC-67; (g) 44%-45% by weight aqueous acrylic latex emulsion identified as Rhoplex AC-61; (h) 64% of dioctyl sodium sulfo-succinate in light petroleum distillate solution; and (i) 2% aqueous solution of Heterpolysaccharide-7.

# The Teachings of Seiner (U.S. Patent No. 3,951,899)

Seiner was cited for its teaching that Rhoplex AC-61 is 70% methyl methacrylate and 30% butyl acrylate.

## Amended Independent Claim 1 Is Not Anticipated by Kang et al.

Kang et al. does not teach the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, Kang et al. does not anticipate the subject matter now recited in amended paragraph (c) of amended Claim 1. Likewise, dependent Claims 2-6, 10-13, and 15-22 are not anticipated by Kang et al. Accordingly, applicant respectfully requests withdrawal of this Section 102(b) rejection based on Kang et al.

# 5. The Third Rejection Under 35 U.S.C. § 102(b)

Claims 1-7 and 15-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Bier (U.S. Patent No. 4,792,357). Claim 7 has been canceled. Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

# The Teachings of Bier (U.S. Patent No. 4,792,357)

Bier teaches a water-based paint which comprises a constituent selected from fillers and pigments, as well as an aqueous phase comprising one or more water-soluble salts in an amount sufficient to substantially prevent dissolution in the paint of water-soluble organic or inorganic colored substances. The water-soluble salt may be present in a concentration of at or above 10%, in particular at or above 35%, such as up to 70%. The paint is said to be useful for the painting

of stained interior building surfaces without allowing water-soluble stains to seep through the wet paint.

# Amended Independent Claim 1 Is Not Anticipated by Bier

Bier does not teach the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, Bier does not anticipate the subject matter now recited in amended paragraph (c) of amended Claim 1. Likewise, dependent Claims 2-6, and 15-22 are not anticipated by Bier. Accordingly, applicant respectfully requests withdrawal of this Section 102(b) rejection based on Bier.

## 6. The First Rejection Under 35 U.S.C. § 103(a)

Claims 8 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Krevenas et al. (U.S. Patent No. 4,045,393), Kang et al. (U.S. Patent No. 3,894,976), or Bier (U.S. Patent No. 4,792,357), any of which in view of Gruenwald (U.S. Patent No. 2,374,678). Claim 8 has been canceled. Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

## The Teachings of Krevenas et al. (U.S. Patent No. 4,045,393)

The teachings of Krevenas et al. are explained above. Those remarks are incorporated herein by reference.

# The Teachings of Kang et al. (U.S. Patent No. 3,894,976)

The teachings of Kang et al. are explained above. Those remarks are incorporated herein by reference.

## The Teachings of Bier (U.S. Patent No. 4,792,357)

The teachings of Bier are explained above. Those remarks are incorporated herein by reference.

# The Teachings of Gruenwald (U.S. Patent No. 2,374,678)

Gruenwald teaches what amounts to a vast number of possible surface-active materials. The reference states that morpholine is particularly satisfactory for this purpose and morpholine may be "combined" with high molecular weight aliphatic compounds and particularly, saturated

or unsaturated straight chain aliphatic compounds containing from 12 to 36 carbon atoms and, if desired, one or more hydroxy, nitro, carboxy, sulpho, amino, keto, alkyl, aryl, or other substituent groups, which compounds may consist of the waxes, fats or oils, or the free fatty acids, or the fatty alcohols or various sulphonated, sulphated, borated, phosphated, or other derivatives thereof. (Col. 1, lines 35-47.)

Gruenwald goes on to state that the morpholine not only appears to form complex salts or addition products with various fatty acid or alkyl carboxylic compounds or acid groups therein, but it also apparently may be further condensed to form various amido-like compounds.

Gruenwald further states that morpholine may react directly with the various esters of these compounds, particularly with the glyceride esters usually occurring in oils, fats, and waxes to produce complex products, which have high surface-active properties in either aqueous or oily media.

Gruenwald states that it has been found that these complexes, when heated after being deposited as a coating or film, most readily decompose with the removal of the morpholine and the deposition of substantially insoluble aliphatic, or fatty acid, or alcohol residues, which are thoroughly dispersed or in a gelatinized condition, and will form a most permanent coating or surface film, whether on fabrics or various other surfaces.

Gruenwald states that the morpholine, and less preferably, its chlorinated, nitrated, hydroxylated, carboxylated, arylated, or alkylated derivatives may be reacted directly with high molecular weight aliphatic materials, such as the fatty acids themselves or even tertiary alcohol derivatives, sulpho derivatives, boro derivatives, or phospho derivatives of high molecular weight aliphatic compounds. It has been found most suitable to react the triglyceride or other esters in the form of oils, fats, or waxes directly with the morpholine, and desirably, under pressure at an elevated temperature. (Col. 1, line 48 through Col. 2, line 25.)

Finally, Gruenwald states that the exact character of the combination between the morpholine and the fatty acid glyceride or oil wax or fat is not certain. (Col. 3, lines 56-68) Thus, Gruenwald teaches the formation of an amide rather a salt.

# Amended Claim 9 Would Not Have Been Obvious in View of This Combination of References

- Amended dependent Claim 9 defines a water-based paint composition, comprising:
  - (a) an opacifying agent;
  - (b) a viscosity enhancing agent;
- (c) an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid wherein the long-chain carboxylic acid is at least one of stearic acid, palmitic acid, and myristic acid;
  - (d) a polymeric binding agent; and
- (e) about 10 to about 50% by weight based on the total weight of the composition is a debonding agent active on metal surfaces wherein the debonding agent comprises a vegetable oil.

Krevenas et al., Kang et al., and Bier do not teach anything regarding the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid wherein the long-chain carboxylic acid is at least one of stearic acid, palmitic acid, and myristic acid. Therefore, the soundness of this rejection depends on the teachings of Gruenwald.

Gruenwald teaches that morpholine may be combined with high molecular weight aliphatic compounds and particularly, saturated or unsaturated straight chain aliphatic compounds containing from 12 to 36 carbon atoms and, if desired, one or more hydroxy, nitro, carboxy, sulpho, amino, keto, alkyl, aryl, or other substituent groups, which compounds may consist of the waxes, fats or oils, or the free fatty acids, or the fatty alcohols or various sulphonated, sulphated, borated, phosphated, or other derivatives thereof. Gruenwald makes only a passing references to "complex salts." Gruenwald further teaches condensing the foregoing derivatives to form various "amido-like" (or amide) compounds.

Gruenwald also teaches using the reaction products produced by reacting morpholine and various esters of the compounds described above. Gruenwald prefers the glyceride esters usually occurring in oils, fats, and waxes to produce "complex products," which have high surface-active properties in either aqueous or oily media.

Thus the number of morpholine derivatives taught by Gruenwald is vast when all possible combinations and derivatives are counted.

There is no specific guidance or suggestion in Gruenwald that would lead one of ordinary skill in the art to employ the three salt derivatives specifically defined in amended Claim 9. To say that the use of the three salt derivatives defined in amended Claim 9 would have been obvious to one of ordinary skill in the art is an improper use of hindsight to reconstruct the claimed invention. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on Krevenas et al., Kang et al., or Bier in view of Gruenwald.

# 7. The Second Rejection Under 35 U.S.C. § 103(a)

Claims 11-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Krevenas et al. (U.S. Patent No. 4,045,393) in view of Schall et al. (U.S. Patent No. 6,013,721). Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

# The Teachings of Krevenas et al. (U.S. Patent No. 4,045,393)

The teachings of Krevenas et al. are explained above. Those remarks are incorporated herein by reference.

# The Teachings of Schall et al. (U.S. Patent No. 6,013,721)

Schall et al. teaches a traffic paint, which is said to dry faster than conventional water-borne traffic paints. The traffic paint composition of Schall et al. includes a blend of an anionically stabilized polymer binder, a polyfunctional amine polymer having an amine and an acid functionality therein, and an amount of a volatile base sufficient to raise the pH of the composition to a point where essentially all of the polyfunctional amine polymer is in a non-ionic state.

# Claims 11-13 Would Not Have Been Obvious in View of This Combination of References

Neither Krevenas et al. nor Schall et al. teaches the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, the combination of Krevenas et al. and Schall et al. does not render obvious the subject matter now

recited in amended paragraph (c) of amended Claim 1, which is incorporated into dependent Claims 11-13. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on Krevenas et al. and Schall et al.

# 8. The Third Rejection Under 35 U.S.C. § 103(a)

Claims 10-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bier (U.S. Patent No. 4,792,357) in view of Schall et al. (U.S. Patent No. 6,013,721). Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

# The Teachings of Bier (U.S. Patent No. 4,792,357)

The teachings of Bier are explained above. Those remarks are incorporated herein by reference.

# The Teachings of Schall et al. (U.S. Patent No. 6,013,721)

The teachings of Schall et al. are explained above. Those remarks are incorporated herein by reference.

# Claims 10-13 Would Not Have Been Obvious in View of This Combination of References

Neither Bier nor Schall et al. teaches the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, the combination of Bier and Schall et al. does not render obvious the subject matter now recited in amended paragraph (c) of amended Claim 1, which is incorporated into dependent Claims 10-13. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on Bier and Schall et al.

# 9. The Fourth Rejection Under 35 U.S.C. § 103(a)

Claims 1-5, 7, and 15-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coleman (U.S. Patent No. 3,959,224). Claim 7 has been canceled. Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

# The Teachings of Coleman (U.S. Patent No. 3,959,224)

Coleman teaches water-soluble hydroxyalkylated and alkoxyalkylated compositions derived from N-3-oxohydrocarbon-substituted acrylamides and polymers thereof.

N-3-oxohydrocarbon-substituted acrylamides, especially diacetone acrylamide, react with aldehydes in alkaline media to form water-soluble compositions, which contain hydroxyalkylated and/or alkoxyalkylated derivatives of the substituted acrylamides. Additional polymers of these water-soluble compositions may be prepared, especially as aqueous lattices or as solutions in organic solvents. These additional polymers are useful in adhesives and coatings. In particular, the polymers may be combined with pigments and/or with alkaline reagents or aminoplast compositions to form paints and textile adhesives.

#### Claims 1-5 and 15-21 Would Not Have Been Obvious In View of Coleman

Coleman teaches nothing regarding the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, Coleman does not render obvious the subject matter now recited in amended paragraph (c) of amended Claim 1, which is incorporated into dependent Claims 11-13. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on Coleman.

# 10. The Fifth Rejection Under 35 U.S.C. § 103(a)

Claims 8 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coleman (U.S. Patent No. 3,959,224) taken in view of Gruenwald (U.S. Patent No. 2,374,678). Claim 8 has been canceled. Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

# The Teachings of Coleman (U.S. Patent No. 3,959,224)

The teachings of Coleman are explained above. Those remarks are incorporated herein by reference.

# The Teachings of Gruenwald (U.S. Patent No. 2,374,678)

The teachings of Gruenwald are explained above. Those remarks are incorporated herein by reference.

#### Amended Claim 9 Would Not Have Been Obvious in View of This Combination of References

Amended dependent Claim 9 defines a water-based paint composition, comprising:

(a) an opacifying agent;

- (b) a viscosity enhancing agent;
- (c) an anionic surfactant comprising a salt derived from morpholine and a

long-chain carboxylic acid wherein the long-chain carboxylic acid is at least one of stearic acid, palmitic acid, and myristic acid;

- (d) a polymeric binding agent; and
- (e) about 10 to about 50% by weight based on the total weight of the composition is a debonding agent active on metal surfaces wherein the debonding agent comprises a vegetable oil.

Coleman does not teach anything regarding the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid wherein the long-chain carboxylic acid is at least one of stearic acid, palmitic acid, and myristic acid. Therefore, the soundness of this rejection depends on the teachings of Gruenwald.

Gruenwald teaches that morpholine may be combined with high molecular weight aliphatic compounds and particularly, saturated or unsaturated straight chain aliphatic compounds containing from 12 to 36 carbon atoms and, if desired, one or more hydroxy, nitro, carboxy, sulpho, amino, keto, alkyl, aryl, or other substituent groups, which compounds may consist of the waxes, fats or oils, or the free fatty acids, or the fatty alcohols or various sulphonated, sulphated, borated, phosphated, or other derivatives thereof. Gruenwald makes only a passing references to "complex salts." Gruenwald further teaches condensing the foregoing derivatives to form various "amido-like" (or amide) compounds.

Gruenwald also teaches using the reaction products produced by reacting morpholine and various esters of the compounds described above. Gruenwald prefers the glyceride esters usually occurring in oils, fats, and waxes to produce "complex products," which have high surface-active properties in either aqueous or oily media.

Thus the number of morpholine derivatives taught by Gruenwald is vast when all possible combinations and derivatives are counted.

There is no specific guidance or suggestion in Gruenwald that would lead one of ordinary skill in the art to employ the three salt derivatives specifically defined in amended Claim 9. To say that the use of the three salt derivatives defined in amended Claim 9 would have been obvious to one of ordinary skill in the art is an improper use of hindsight to reconstruct the claimed invention. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on Coleman in view of Gruenwald.

## 11. The Sixth Rejection Under 35 U.S.C. § 103(a)

Claims 10-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coleman (U.S. Patent No. 3,959,224) taken in view of Schall et al. (U.S. Patent No. 6,013,721). Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

#### The Teachings of Coleman (U.S. Patent No. 3,959,224)

The teachings of Coleman are explained above. Those remarks are incorporated herein by reference.

# The Teachings of Schall et al. (U.S. Patent No. 6,013,721)

The teachings of Schall et al. are explained above. Those remarks are incorporated herein by reference.

## Claims 10-13 Would Not Have Been Obvious

Neither Coleman nor Schall et al. teaches the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, the combination of Coleman and Schall et al. does not render obvious the subject matter now recited in amended paragraph (c) of amended Claim 1, which is incorporated into dependent Claims 10-13. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on Coleman and Schall et al.

#### 12. The Seventh Rejection Under 35 U.S.C. § 103(a)

Claims 24 and 26-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Krevenas et al. (U.S. Patent No. 4,045,393) taken in view of Gruenwald (U.S. Patent

No. 2,374,678). Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

# The Teachings of Krevenas et al. (U.S. Patent No. 4,045,393)

The teachings of Krevenas et al. are explained above. Those remarks are incorporated herein by reference.

# The Teachings of Gruenwald (U.S. Patent No. 2,374,678)

The teachings of Gruenwald are explained above. Those remarks are incorporated herein by reference.

# Claims 24 and 26-28 Would Not Have Been Obvious

Krevenas et al. does not teach anything regarding the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, the soundness of this rejection depends on the teachings of Gruenwald.

Gruenwald teaches that morpholine may be combined with high molecular weight aliphatic compounds and particularly, saturated or unsaturated straight chain aliphatic compounds containing from 12 to 36 carbon atoms and, if desired, one or more hydroxy, nitro, carboxy, sulpho, amino, keto, alkyl, aryl, or other substituent groups, which compounds may consist of the waxes, fats or oils, or the free fatty acids, or the fatty alcohols or various sulphonated, sulphated, borated, phosphated, or other derivatives thereof. Gruenwald makes only a passing references to "complex salts." Gruenwald further teaches condensing the foregoing derivatives to form various "amido-like" (or amide) compounds.

Gruenwald also teaches using the reaction products produced by reacting morpholine and various esters of the compounds described above. Gruenwald prefers the glyceride esters usually occurring in oils, fats, and waxes to produce "complex products," which have high surface-active properties in either aqueous or oily media.

Thus the number of morpholine derivatives taught by Gruenwald is vast when all possible combinations and derivatives are counted.

There is no specific guidance or suggestion in Gruenwald that would lead one of ordinary skill in the art to employ the salt derivatives specifically defined in amended independent Claim 24. To say that the use of the salt derivatives defined in amended Claim 24 would have been obvious to one of ordinary skill in the art is an improper use of hindsight to reconstruct the claimed invention. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on Krevenas et al. combined with Gruenwald.

# 13. The Eighth Rejection Under 35 U.S.C. § 103(a)

Claims 24 and 26-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bier (U.S. Patent No. 4,792,357) or Kang et al. (U.S. Patent No. 3,894,976) either of which in view of Gruenwald (U.S. Patent No. 2,374,678). Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

## The Teachings of Bier (U.S. Patent No. 4,792,357)

The teachings of Bier are explained above. Those remarks are incorporated herein by reference.

# The Teachings of Kang et al. (U.S. Patent No. 3,894,976)

The teachings of Kang et al. are explained above. Those remarks are incorporated herein by reference.

## The Teachings of Gruenwald (U.S. Patent No. 2,374,678)

The teachings of Gruenwald are explained above. Those remarks are incorporated herein by reference.

#### Claims 24 and 26-28 Would Not Have Been Obvious

Neither Bier nor Kang et al. teaches the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, the combination of Bier and Kang et al. does not render obvious the subject matter recited in paragraph (c) of amended Claim 24. Therefore, the soundness of this rejection depends on the teachings of Gruenwald.

Gruenwald teaches that morpholine may be combined with high molecular weight aliphatic compounds and, particularly, saturated or unsaturated straight chain aliphatic

compounds containing from 12 to 36 carbon atoms and, if desired, one or more hydroxy, nitro, carboxy, sulpho, amino, keto, alkyl, aryl, or other substituent groups, which compounds may consist of the waxes, fats or oils, or the free fatty acids, or the fatty alcohols or various sulphonated, sulphated, borated, phosphated, or other derivatives thereof. Gruenwald makes only a passing references to "complex salts." Gruenwald further teaches condensing the foregoing derivatives to form various "amido-like" (or amide) compounds.

Gruenwald also teaches using the reaction products produced by reacting morpholine and various esters of the compounds described above. Gruenwald prefers the glyceride esters usually occurring in oils, fats, and waxes to produce "complex products," which have high surface-active properties in either aqueous or oily media.

Thus the number of morpholine derivatives taught by Gruenwald is vast when all possible combinations and derivatives are counted.

There is no specific guidance or suggestion in Gruenwald that would lead one of ordinary skill in the art to employ the specific morpholine salt derivatives defined in amended Claim 24. To say that the use of the three salt derivatives defined in amended Claim 24 would have been obvious to one of ordinary skill in the art is an improper use of hindsight to reconstruct the claimed invention. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on Bier, Kang et al., and Gruenwald.

# 14. The Ninth Rejection Under 35 U.S.C. § 103(a)

Claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bier (U.S. Patent No. 4,792,357) or Kang et al. (U.S. Patent No. 3,894,976) either of which in view of Gruenwald (U.S. Patent No. 2,374,678) and further in view of Nonweiler et al. (U.S. Patent No. 5,700,522). Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

## The Teachings of Bier (U.S. Patent No. 4,792,357)

The teachings of Bier are explained above. Those remarks are incorporated herein by reference.

The Teachings of Kang et al. (U.S. Patent No. 3,894,976)

The teachings of Kang et al. are explained above. Those remarks are incorporated herein

by reference.

The Teachings of Gruenwald (U.S. Patent No. 2,374,678)

The teachings of Gruenwald are explained above. Those remarks are incorporated herein by reference.

The Teachings of Nonweiler et al. (U.S. Patent No. 5,700,522)

Nonweiler et al. teaches an aqueous emulsion coating exhibiting a coating composition exhibiting a viscosity of at least 20 Centipoise, containing a binder with the molecular weight of at least 50,000, and a glass transition temperature of at least 10°C, and a filler, wherein the binder is present in about 20 parts to about 50 parts by weight and the filler up to 60 parts by weight. The composition can also contain effective amounts of one or more additives consisting of a coalescents, humectants, thickeners, surfactants, and defoamers. The composition is particularly well suited to application to substrates common to the hobby, modeling, and toy industry. Nonweiler et al. teaches that it is preferred to allow the coating to cure at a temperature of at least 13°C for as long as one week to generate the maximum obtainable properties.

#### Claim 25 Would Not Have Been Obvious in View of This Combination of References

Neither Bier nor Kang et al. nor Nonweiler et al. teaches the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, the combination of Bier, Kang et al., and Nonweiler et al. does not render obvious the subject matter recited in paragraph (c) of amended Claim 24. Therefore, the soundness of this rejection depends on the teachings of Gruenwald.

Gruenwald teaches that morpholine may be combined with high molecular weight aliphatic compounds and particularly, saturated or unsaturated straight chain aliphatic compounds containing from 12 to 36 carbon atoms and, if desired, one or more hydroxy, nitro, carboxy, sulpho, amino, keto, alkyl, aryl, or other substituent groups, which compounds may consist of the waxes, fats or oils, or the free fatty acids, or the fatty alcohols or various

sulphonated, sulphated, borated, phosphated, or other derivatives thereof. Gruenwald makes only a passing references to "complex salts." Gruenwald further teaches condensing the foregoing derivatives to form various "amido-like" (or amide) compounds.

Gruenwald also teaches using the reaction products produced by reacting morpholine and various esters of the compounds described above. Gruenwald prefers the glyceride esters usually occurring in oils, fats, and waxes to produce "complex products," which have high surface-active properties in either aqueous or oily media.

Thus the number of morpholine derivatives taught by Gruenwald is vast when all possible combinations and derivatives are counted.

There is no specific guidance or suggestion in Gruenwald that would lead one of ordinary skill in the art to employ the specific morpholine salt derivatives defined in amended Claim 24, which is incorporated into dependent Claim 25. To say that the use of the three salt derivatives defined in amended Claim 24 would have been obvious to one of ordinary skill in the art is an improper use of hindsight to reconstruct the claimed invention. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on the combination of Bier, Kang et al., Nonweiler et al., and Gruenwald.

## 15. The Tenth Rejection Under 35 U.S.C. § 103(a)

Claims 24 and 26-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Coleman (U.S. Patent No. 3,959,224) in view of Gruenwald (U.S. Patent No. 2,374,678). Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

# The Teachings of Coleman (U.S. Patent No. 3,959,224)

The teachings of Coleman are explained above. Those remarks are incorporated herein by reference.

#### The Teachings of Gruenwald (U.S. Patent No. 2,374,678)

The teachings of Gruenwald are explained above. Those remarks are incorporated herein by reference.

#### Claims 24 and 26-28 Would Not Have Been Obvious

Coleman teaches nothing regarding the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, Coleman alone does not render obvious the subject matter recited in paragraph (c) of amended Claim 24. Therefore, the soundness of this rejection depends on the teachings of Gruenwald.

Gruenwald teaches that morpholine may be combined with high molecular weight aliphatic compounds and particularly, saturated or unsaturated straight chain aliphatic compounds containing from 12 to 36 carbon atoms and, if desired, one or more hydroxy, nitro, carboxy, sulpho, amino, keto, alkyl, aryl, or other substituent groups, which compounds may consist of the waxes, fats or oils, or the free fatty acids, or the fatty alcohols or various sulphonated, sulphated, borated, phosphated, or other derivatives thereof. Gruenwald makes only a passing references to "complex salts." Gruenwald further teaches condensing the foregoing derivatives to form various "amido-like" (or amide) compounds.

Gruenwald also teaches using the reaction products produced by reacting morpholine and various esters of the compounds described above. Gruenwald prefers the glyceride esters usually occurring in oils, fats, and waxes to produce "complex products," which have high surface-active properties in either aqueous or oily media.

Thus the number of morpholine derivatives taught by Gruenwald is vast when all possible combinations and derivatives are counted.

There is no specific guidance or suggestion in Gruenwald that would lead one of ordinary skill in the art to employ the specific morpholine salt derivatives defined in amended Claim 24. To say that the use of the three salt derivatives defined in amended Claim 24 would have been obvious to one of ordinary skill in the art is an improper use of hindsight to reconstruct the claimed invention. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on the combination of Coleman and Gruenwald.

## 16. The Eleventh Rejection Under 35 U.S.C. § 103(a)

(U.S. Patent No. 3,959,224) in view of Gruenwald (U.S. Patent No. 2,374,678) and further in view of Nonweiler et al. (U.S. Patent No. 5,700,522). Applicant respectfully requests reconsideration and withdrawal of this rejection for the following reasons.

Claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Coleman

## The Teachings of Coleman (U.S. Patent No. 3,959,224)

The teachings of Coleman are explained above. Those remarks are incorporated herein by reference.

## The Teachings of Gruenwald (U.S. Patent No. 2,374,678)

The teachings of Gruenwald are explained above. Those remarks are incorporated herein by reference.

## The Teachings of Nonweiler et al. (U.S. Patent No. 5,700,522)

The teachings of Nonweiler et al. are explained above. Those remarks are incorporated herein by reference.

## Claim 25 Would Not Have Been Obvious in View of This Combination of References

Neither Coleman nor Nonweiler et al. teaches the use of an anionic surfactant comprising a salt derived from morpholine and a long-chain carboxylic acid. Therefore, the combination of Coleman and Nonweiler et al. does not render obvious the subject matter recited in paragraph (c) of amended Claim 24, which is incorporated into dependent Claim 25. Therefore, the soundness of this rejection depends on the teachings of Gruenwald.

Gruenwald teaches that morpholine may be combined with high molecular weight aliphatic compounds and particularly, saturated or unsaturated straight chain aliphatic compounds containing from 12 to 36 carbon atoms and, if desired, one or more hydroxy, nitro, carboxy, sulpho, amino, keto, alkyl, aryl, or other substituent groups, which compounds may consist of the waxes, fats or oils, or the free fatty acids, or the fatty alcohols or various sulphonated, sulphated, borated, phosphated, or other derivatives thereof. Gruenwald makes

only a passing references to "complex salts." Gruenwald further teaches condensing the foregoing derivatives to form various "amido-like" (or amide) compounds.

Gruenwald also teaches using the reaction products produced by reacting morpholine and various esters of the compounds described above. Gruenwald prefers the glyceride esters usually occurring in oils, fats, and waxes to produce "complex products," which have high surface-active properties in either aqueous or oily media.

Thus the number of morpholine derivatives taught by Gruenwald is vast when all possible combinations and derivatives are counted.

There is no specific guidance or suggestion in Gruenwald that would lead one of ordinary skill in the art to employ the specific morpholine salt derivatives defined in Claim 25. To say that the use of the three salt derivatives defined in Claim 25 would have been obvious to one of ordinary skill in the art is an improper use of hindsight to reconstruct the claimed invention. Accordingly, applicant respectfully requests withdrawal of this Section 103(a) rejection based on the combination of Coleman, Nonweiler et al., and Gruenwald.

# 17. The Examiner's Comments on Applicant's Prior Arguments

Applicant respectfully submits that the Examiner's comments are now moot in view of the present amendments to independent Claims 1 and 24.

# **CONCLUSION**

In view of the above discussion, applicant believes that the pending claims (Claims 1-6, 9-13, 15-22, and 24-28) are in condition for allowance. Applicant respectfully requests

reconsideration allowance of these claims. If any issues remain that may be expeditiously address in a telephone interview, the Examiner is encouraged to telephone applicant's

undersigned attorney at 206-695-1707.

Respectfully submitted,

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